

## Farm Finances

Previous versions of the Family Farm Report presented income statement and balance sheet items as averages per reporting farm. The present report, however, uses averages for all farms. This allows interpreting the data as an average income statement and an average balance sheet.<sup>8</sup> *Note also that the estimates presented here differ from the official USDA sector estimates. (See the box.)*

This report also includes “common-size” financial statements. Common-size financial statements are useful when comparing financial data among farms in different sales classes. According to Fraser (1988, p. 125):

Common size financial statements are a form of financial ratio analysis that allows the comparison of firms with different levels of sales or total assets by introducing a common denominator. A common size balance sheet expresses each item on the balance sheet as a percentage of total assets; and a common size income statement expresses each income statement category as a percentage of net sales [gross cash income for farms] . . .

### The Income Statement

An abbreviated income statement appears in table 5. Gross cash income is the total cash income generated by farming operations, through farming and closely related activities. Net cash farm income is calculated by deducting cash expenses from gross farm income. Net farm income is derived from net cash farm income by subtracting noncash expenses, adjusting for inventory change, and adding noncash income. Noncash expenses are depreciation and nonmonetary benefits provided to labor. Noncash income includes the value of agricultural products consumed at home and the imputed rental value of farm dwellings.

Gross cash income averaged \$68,900 dollars for all farms in 1993. Net cash farm income and net farm income were considerably less, \$11,700 and \$10,900 respectively. Income statement items varied considerably by farm size, however. For example, gross cash

<sup>8</sup>Appendix tables dealing with financial data continue to use dollars per reporting farm. The public often requests financial data in that form.

income ranged from \$11,900 for noncommercial farms to \$2.2 million for superlarge farms. With very few exceptions, the average for each income and expense item in table 5 increased by a statistically significant amount with each increase in sales class.

Noncommercial farms had particularly low average net cash income (-\$800) and net farm income (\$1,100). As noted in a later section of this report, households running noncommercial farms and smaller commercial farms depend heavily on off-farm sources of income.

The common-size income statement farther down in table 5 provides some insight into differences in the sources of income for farms of different sizes. Farms in the commercial size classes received a greater percentage of their income from crops than noncommercial farms, explained by commercial farms' heavier specialization in crops. About 49 percent of commer-

### Caution:

#### Farm Business Estimates Differ from Farm Sector Estimates

FCRS financial data presented in this report are based on information provided by the sampled operations about their farm (or ranch) businesses. This financial information, which relates strictly to the farm business, differs conceptually from official USDA sector estimates, which include not only farm businesses but also all participants in the sector. For example, the income of farm businesses estimated from the FCRS includes the income of those with ownership interest in the operation—farm operators, partners, and shareholders. In addition to these participants, USDA's sector estimates include others, such as contractors and landlords, who share the risks of production (U.S. Dept. Agr., Econ. Res. Serv., 1993b; Hoppe, 1995). Official sector estimates also use a combination of data sources and cover all 50 States rather than the 48 contiguous States covered by the FCRS. More information about the survey's comparability with other sources of data can be found in appendix B.

**Table 5—Selected farm business financial characteristics by sales class, 1993**

Item	Noncommercial		Small commercial		Lower medium commercial		Upper medium commercial		Large commercial		Superlarge commercial		All farms	
	Estimate	RSE <sup>1</sup>	Estimate	RSE <sup>1</sup>	Estimate	RSE <sup>1</sup>	Estimate	RSE <sup>1</sup>	Estimate	RSE <sup>1</sup>	Estimate	RSE <sup>1</sup>	Estimate	RSE <sup>1</sup>
Number of farms	1,514,476	3.1	210,478	4.8	222,645	3.2	70,300	5.2	30,575	7.3	14,825	6.7	2,063,300	2.3
<i>Dollars per farm</i>														
Gross cash income	11,922	3.1	76,576	2.1	155,124	1.4	326,372	2.0	571,882	5.0	2,226,139	8.4	68,891	3.3
Livestock sales	5,476	3.8	32,826	4.4	64,437	3.5	123,236	5.9	231,956	8.3	1,128,005	15.6	30,062	5.2
Crop sales	2,979	5.0	25,648	4.9	60,862	3.5	144,766	5.2	252,146	7.8	928,293	11.2	26,709	4.1
Government payments	1,245	6.7	7,409	6.7	14,482	4.3	25,902	5.4	28,019	7.4	32,153	9.0	4,761	3.1
Other farm-related income	2,222	8.9	10,692	12.8	15,343	7.4	32,467	10.6	59,761	22.8	137,688	14.2	7,359	5.2
Cash expenses	12,730	2.9	62,604	3.0	119,564	1.8	250,806	2.4	462,697	5.4	1,829,946	11.1	57,182	3.6
Net cash farm income	-808	35.9	13,972	10.9	35,560	4.6	75,566	4.7	109,186	14.4	396,193	11.3	11,709	5.4
Net farm income	1,105	31.4	8,709	21.4	25,700	7.6	50,378	11.5	95,287	16.3	461,605	13.5	10,918	6.6
Farm assets	261,606	3.2	488,497	4.1	656,507	2.8	1,079,544	5.8	1,497,860	5.5	4,013,647	11.1	400,511	2.3
Liabilities	17,359	5.5	74,791	7.1	116,519	5.7	208,359	5.2	316,709	5.8	893,219	12.5	51,154	3.5
Equity	244,247	3.4	413,706	4.9	539,989	3.0	871,185	7.0	1,181,151	6.8	3,120,428	13.2	349,356	2.4
Capital investments	4,337	8.2	11,958	7.1	20,133	5.3	36,237	6.9	62,551	17.1	133,727	15.0	9,698	4.3
<i>Percent of gross cash income</i>														
Gross cash income	100.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0
Livestock sales	45.9	3.0	42.9	4.6	41.5	3.4	37.8	5.6	40.6	6.9	50.7	9.9	43.6	3.2
Crop sales	25.0	4.4	33.5	5.0	39.2	3.1	44.4	4.8	44.1	6.6	41.7	11.0	38.8	3.1
Government payments	10.5	6.1	9.7	6.4	9.3	4.2	7.9	5.3	4.9	7.3	1.4	12.2	6.9	3.2
Other farm-related income	18.6	7.4	14.0	11.2	9.9	6.9	10.0	10.3	10.5	21.0	6.2	15.9	10.7	5.0
Cash expenses	106.8	2.4	81.8	2.3	77.1	1.3	76.9	1.3	80.9	3.0	82.2	3.4	83.0	1.0
Net cash farm income	-6.8	37.1	18.3	10.5	22.9	4.3	23.2	4.3	19.1	12.8	17.8	15.8	17.0	5.0
Net farm income	9.3	31.3	11.4	21.9	16.6	7.4	15.4	11.1	16.7	14.3	20.7	12.3	15.9	5.7
<i>Percent of assets</i>														
Farm assets	100.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0
Liabilities	6.6	5.9	15.3	7.6	17.8	5.1	19.3	6.8	21.1	7.3	22.3	12.8	12.8	3.1
Equity	93.4	0.4	84.7	1.4	82.3	1.1	80.7	1.6	78.9	1.9	77.8	3.7	87.2	0.5
Capital investments	1.7	8.6	2.5	8.4	3.1	5.1	3.4	8.2	4.2	18.3	3.3	17.5	2.4	4.3

<sup>1</sup>The relative standard error (RSE) provides the means of evaluating the survey results. A smaller RSE indicates greater reliability of the estimate. For more information, see the box on data sources or appendix B. Source: Economic Research Service, compiled from the 1993 Farm Costs and Returns Survey.

cial farms specialized in crops, compared with only 39 percent of noncommercial farms.

Government payments were a larger percentage of gross cash income for noncommercial farms, small commercial, and lower medium commercial farms than for farms in the larger commercial classes. Although the average government payment was higher for the larger commercial farms, these farms had enough income from other sources to make government payments a smaller share of total cash income.<sup>9</sup>

About 19 percent of noncommercial farms' gross cash income came from other farm-related income. This item averaged only \$2,200 for noncommercial farms, however. Commercial farms had larger amounts of this income, but it accounted for a smaller share of gross cash income.

For all the commercial size classes, cash expenses ran about 80 percent of gross cash income, making net cash income about 20 percent of gross cash income. For noncommercial farms, however, average cash expenses were 7 percent higher than gross cash income, resulting in negative average net cash farm income.

### **The Balance Sheet**

As with income statement items, assets, liabilities, equity, and capital investments per farm increased with each increase in sales class (table 5). For farms in the commercial sales classes, liabilities as a percentage of assets (the debt/asset ratio) were between 15 and 22 percent. Noncommercial farms had much lower debt relative to assets, with a debt/asset ratio of only 7 percent. Capital investments were a smaller percentage of assets, however, for noncommercial than for commercial farms.

### **Sharing Income and Equity**

Readers examining table 5 may be impressed by the large average equity for farms of all sales classes and the large net farm income for farms in the larger sales classes. But, a certain amount of equity is necessary to continue the farm as a business. Maintaining or expanding this equity base may also require capital investment, which must be paid for out of current net income, the sale of assets, or loans. For larger farms, these expenditures can be substantial (table 5). Even after allowing for an equity base and capital investment, not all the

<sup>9</sup>Government payments are not adjusted for payment limitations in this report.

farm's equity and net farm income are necessarily available to the farm operator and his or her household for two reasons.

First, some farms (nonfamily corporations, cooperatives, or farms with a hired manager) are not closely held (or legally controlled) by the operator household. These operator households have limited say over the distribution of their farms' net income or equity. Farms not closely held by the operator household are relatively rare, however. Closely held farms accounted for 99 percent of all farms in 1993 and at least 95 percent of farms in each sales class except the superlarge class, where 82 percent of the farms were closely held.

Second, even if the farm is closely held by the operator household, the operator household may share farm income, farm assets, or farm debt with other households. Income, assets, and debt may be shared with partners, relatives who no longer live on the farm, and shareholders in family corporations.

Noncommercial farms best fit the traditional view of farming, where each farm is closely held by a single operator household that receives all the farm's net income and holds all the farm's assets and debts. About 92 percent of noncommercial farms fit this single-household-per-farm view of farming (fig. 11) in 1993. The percentage of single-household farms was less for commercial farms. For example, only 48 percent of superlarge farms were single-household farms. Commercial farms today may require more management, labor, and financial resources than can be provided by a single household.<sup>10</sup> They distribute the returns from farming to more than one household.

### **Farm Financial Performance**

Both net farm income and debt/asset ratios are used to assess financial performance. To get a complete picture of a farm's economic health, however, the two measures must be considered together. Used independently of

<sup>10</sup>The single-household farm described above is based (in part) on who receives shares of farm business income, where farm business income is defined narrowly to exclude shares received by share landlords and contractors. A second definition of single-household farms used by ERS also considers sharing of output with share landlords and contractors. The second definition classifies a farm as single-household if it is closely held, shares income with no other household, has no share landlords, and has no production contracts. This second definition results in substantially fewer single-household farms (74 percent of all farms) than the first definition (90 percent).

each other, they have limitations. For example, if a farm earns enough income to service debt and meet its other financial obligations, then a high debt/asset ratio may be manageable. Similarly, an operation carrying a low debt load may be able to weather periods of low or negative income.

To reflect the range of financial situations, ERS developed a measure of overall financial position of farms based on their combined net income and solvency status (Morehart, Johnson, and Banker, 1992, pp. 34-35):

- Favorable: positive net farm income and debt/asset ratio is no more than 40 percent.
- Marginal income: negative net farm income and debt/asset ratio is no more than 40 percent.

- Marginal solvency: positive net farm income and debt/asset ratio more than 40 percent.
- Vulnerable: negative net farm income and debt/asset ratio more than 40 percent.

Most farms (60 percent) were in a favorable financial position in 1993 (table 6). These farms averaged about \$76,200 dollars in gross sales, similar to the average for all farms. Farms in a favorable financial position accounted for about 62 percent of gross sales and 61 percent of gross cash income.

Another 29 percent of farms were in the marginal income category. These farms tended to be smaller operations, averaging only \$42,800 in sales. They made 17 percent of farm sales and received 19 percent of gross cash income. No farm can remain in the mar-

**Table 6—Farms, gross cash income, and gross farm sales, by financial position, 1993**

Item	Farms		Mean gross cash income		Mean gross farm sales	
	Number	RSE <sup>1</sup>	Dollars	RSE <sup>1</sup>	Dollars	RSE <sup>1</sup>
All farms	2,063,300	2.3	68,891	3.3	73,694	3.7
Favorable	1,229,371	3.0	70,187	3.7	76,186	4.7
Marginal income	607,106	4.5	43,735	6.1	42,842	6.2
Marginal solvency	123,317	9.3	173,269	14.9	188,247	14.1
Vulnerable	103,506	12.4	76,690	13.2	88,570	14.6

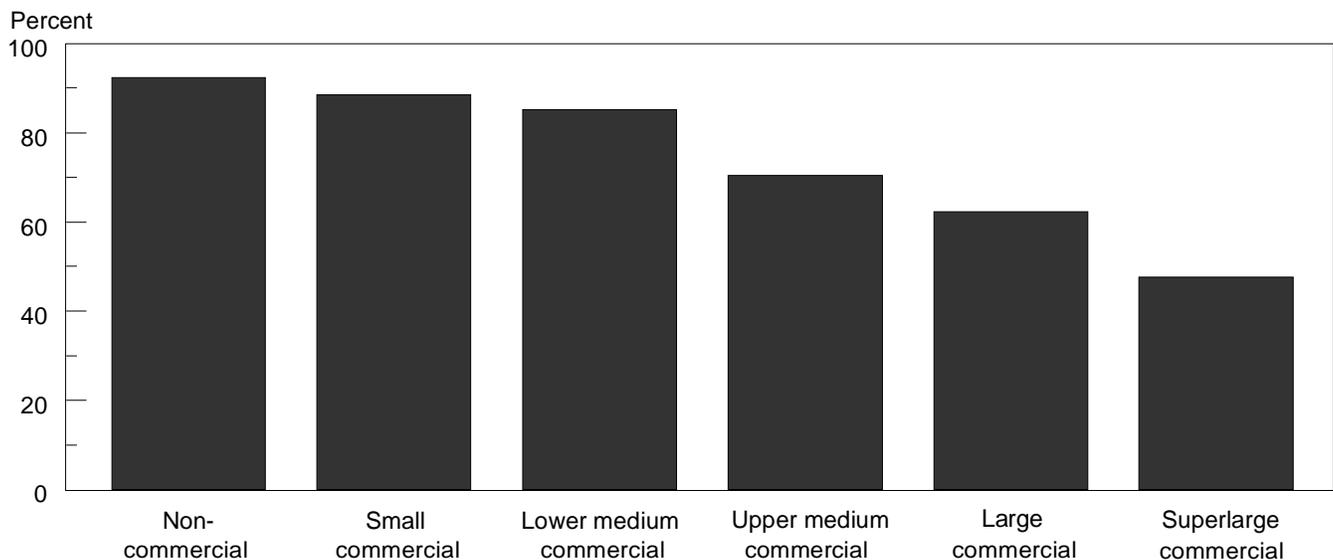
<sup>1</sup>The relative standard error (RSE) provides the means of evaluating the survey results. A smaller RSE indicates greater reliability of the estimate. For more information, see the box on data sources or appendix B.

Source: Economic Research Service, compiled from the 1993 Farm Costs and Returns Survey.

Figure 11

**Single-household farms by sales class, 1993**

*Single-household farms are more common among smaller size classes*



Note: Single-household farms are closely held by the operator household, and the operator household does not share farm income, farm assets, or farm debt with another household.

Source: Economic Research Service, compiled from the 1993 Farm Costs and Returns Survey.

ginal income category indefinitely, unless it is subsidized with additional funds, such as off-farm wages. In many cases, a farm will make enough in other years to cover a year of negative returns.

Marginally solvent farms tended to be larger, with average gross sales of \$188,200. Only 6 percent of all farms, they accounted for about 15 percent of both gross cash income and gross sales. Even if a farm has high debt, it may still be viable because net farm income is sufficient to meet financial obligations.

Vulnerable farms were relatively rare, accounting for only 5 percent of all farms in 1993. These farms' average sales and average gross cash income were similar to those of farms in the favorable category. Vulnerable farms experience financial stress and may have to undertake drastic actions to reduce debt and generate additional income.

Commercial and noncommercial farms were equally likely to be in a favorable financial position (fig. 12). Compared with commercial farms, however, noncommercial farms were more likely to be in the marginal income category and less likely to be in the marginal solvency category. The difference between noncommercial and commercial farms in the percentage of vulnerable farms was not statistically significant.

As discussed in a later section, households operating noncommercial farms rely heavily on off-farm income. They sustain low income or losses from farming with money earned off the farm. Although noncommercial

farms tend to have small positive or even negative net farm income, they also have little debt. Thus, they generally fall into the favorable and marginal income categories.

Commercial farms, however, are more likely to be run as profit-oriented businesses. For example, return on assets and the ratio of sales to assets were higher for commercial than for noncommercial farms (fig. 13).<sup>11</sup> Businesses often incur debts in the production process, even if they have substantial income. Commercial farms, therefore, are more likely than noncommercial farms to be marginally solvent.

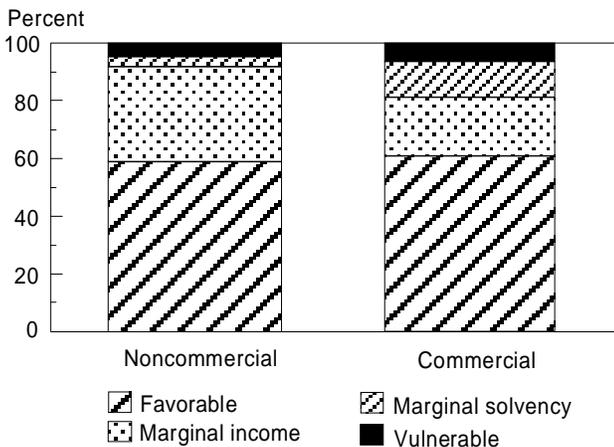
### Variation by Type of County

Although this discussion of financial data has focused on variation in finances by size of farm, farm finances also vary with other characteristics, including geographic location. Farm finances in farming-dependent counties are of particular interest whenever farm program changes are under consideration. Policymakers are often concerned about the effects of program changes in areas most dependent on farming.

Average gross cash income in 1993 was highest in farming-dependent counties (\$102,100) followed by metro counties (\$76,500) and other nonmetro counties

Figure 12  
**Financial performance by sales class, 1993**

*Most farms performed favorably in 1993*

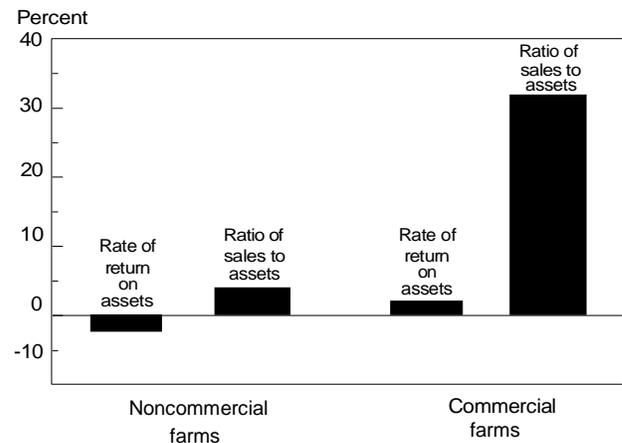


Note: See text for definition of performance categories.  
Source: Economic Research Service, compiled from the 1993 Farm Costs and Returns Survey.

<sup>11</sup>See appendix A for the definition of return on assets.

Figure 13  
**Return on assets and ratio of sales to assets, by sales class, 1993**

*Smaller farms have lower rate of return*



Source: Economic Research Service, compiled from the 1993 Farm Costs and Returns Survey.

**Table 7—Selected farm business financial characteristics by type of county, 1993**

Item	Farming-dependent		Other nonmetro		Metro		All farms	
	<i>Estimate</i>	<i>RSE</i> <sup>1</sup>	<i>Estimate</i>	<i>RSE</i> <sup>1</sup>	<i>Estimate</i>	<i>RSE</i> <sup>1</sup>	<i>Estimate</i>	<i>RSE</i> <sup>1</sup>
Number of farms	311,594	6.3	1,112,066	3.3	639,640	4.7	2,063,300	2.3
<i>Dollars per farm</i>								
Gross cash income	102,119	7.1	55,179	3.8	76,544	7.5	68,891	3.3
Livestock sales	45,029	10.0	25,470	5.0	30,755	13.4	30,062	5.2
Crop sales	32,599	8.0	19,328	5.2	36,673	8.4	26,709	4.1
Government payments	10,803	6.6	4,283	4.7	2,650	7.1	4,761	3.1
Other farm-related income	13,688	12.9	6,098	6.8	6,467	9.4	7,359	5.2
Cash expenses	82,530	7.4	44,476	3.6	66,924	8.4	57,182	3.6
Net cash farm income	19,589	8.3	10,702	7.1	9,620	14.3	11,709	5.4
Net farm income	14,032	11.4	9,601	8.3	11,690	15.0	10,918	6.6
Farm assets	457,983	6.6	350,725	2.8	459,071	4.4	400,511	2.3
Liabilities	73,277	7.2	44,133	4.2	52,585	8.0	51,154	3.5
Equity	384,706	7.1	306,592	3.0	406,486	4.6	349,356	2.4
Capital investments	13,198	7.5	9,008	5.6	9,193	9.9	9,698	4.3

<sup>1</sup>The relative standard error (RSE) provides the means of evaluating the survey results. A smaller RSE indicates greater reliability of the estimate. For more information, see the box on data sources or appendix B.

Source: Economic Research Service, compiled from the 1993 Farm Costs and Returns Survey.

(\$55,200) (table 7). After cash expenses were subtracted, farms in farming-dependent counties also had the highest average net cash income. Average net farm income estimates in the three groups of counties, however, ranged within \$4,400 of each other.

Average equity was greater in farming-dependent counties (\$384,700) and metro counties (\$406,500) than in other nonmetro counties (\$306,600). Farms in farming-dependent counties, however, had the highest debt/asset ratio (16 percent).

Average government payments were \$10,800 in farming-dependent counties, compared with less than \$5,000 in the two other county groups. About 11 percent of gross cash income in farming-dependent counties came from government payments, more than in

other nonmetro counties (8 percent) or in metro counties (3 percent). With 15 percent of U.S. farms, farming-dependent counties had 35 percent of set-aside acres and 49 percent of CRP acres.

Farm commodity programs are often believed to have a large effect on local economies. However, program payments made up only 7 percent of gross cash income nationwide in 1993. Government payments are most likely to have an impact in farming-dependent counties, particularly those specializing in covered commodities (Hoppe, 1994, pp. 25). In counties that are not farming-dependent, government programs boost farmers' income, but have less of an impact on the overall economy (Perry and Whittaker, 1994, pp. 4-5).